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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/297,591 05/03/99 NAMBU

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EXAMINER

CHOI, F

ART UNIT

PAPER NUMBER

1616

DATE MAILED:

01/11/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No.

09/297,591

Applicant(s)

NAMBU, TAKANORI

Examiner

Frank I Choi

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: The Specification and claims disclose numerous polymers having different structures.

During a telephone conversation with Andrew Paul on 01/08/01, a provisional election was made with traverse to prosecute the invention of YUKAFORMER SM, polyquaternium-4, a homopolymer of acrylic acid and water. Affirmation of this election must be made by applicant

in replying to this Office action. Upon prosecution, it appears that the above combination is allowable over the prior art, subject to update of the prior art herein. As such, Examiner has expanded the search to include all disclosed species. Claims 1-13 will be prosecuted accordingly.

Specification

The use of the trademarks DIAFORMER(pg. 4, line 35), MARASPERSE (pg. 9, line 3), GAFQUAT (pg. 10, line 8), TETEN (pg. 15, line 8), CATREX (pg. 15, line 9), INDOPOL (pg. 19, line 16) and KATHON (pg. 19, line 27) have been noted in this application. They should be capitalized wherever it appears and be accompanied by the generic terminology. Examiner notes that KATHON does not indicate the manufacturer, as such, Examiner suggests that the symbol ® be used also. Examiner requests that Applicant carefully review Specification to determine whether other trademarks are present which should be capitalized.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

The disclosure is objected to because of the following informalities: Pg. 21, line 23, after "art.", the "a" should be "A".

Appropriate correction is required.

Claims 4-13 are objected to because of the following informalities:

Dependent claims should begin with a "The" not an "A".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 7, the phrase "such that" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. Examiner suggests using "wherein".

Claims 1-13 are rendered indefinite because the claims set forth amounts of the anionic, cationic and amphoteric polymers, however, Examples 2 and 4 of the Specification which are purported to be embodiments of the claimed invention appear to fall outside of the claimed limitation. As such the claims are rendered indefinite as it is uncertain what is and what is not subject matter which Applicant regards as its invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Grollier et al. for the reasons of record set forth in the prior Office Action relative to claims 1-4 and the further reasons below.

Grollier et al (U.S. 4,240,450) was discussed in the prior Office Action and the same is incorporated herein.

Examiner had duly considered Applicant's arguments but deems them unpersuasive.

The test for obviousness is not that the claimed invention must be expressly suggested in the references. Rather, the test is what the combined teachings of the reference would have suggested to those of ordinary skill in the art. See *In re Keller*, 208 USPQ 871 (CCPA 1981).

Applicant argues that the amounts of the components are critical to the invention, however, the Specification clearly discloses purported embodiments of the invention which appear to fall outside of the limitations in Claim 1 (See Examples 2 and 4). Herein, the references teaches the use of a combination of amphoteric, cationic and anionic polymers and non-ionic surfactants. As such, it would have been well within the skill of one of ordinary skill of art to arrive at the various amounts through optimization of the prior art values depending on the desired characteristics of the composition, for example, length of hold, flexibility, resistance to humidity and foaming. Further, Grollier et al. does teach that the composition can be formulated as hair sprays (Column 51, lines 63-65).

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kajino et al. (U.S. Pat. 5,254,333).

Kajino et al. teach a hair treatment composition comprising a combination of amphoteric, cationic and anionic polymers, solvent, and a nonionic surfactant, wherein the

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polymers are preferably used in an amount of from 0.01 to 10% by weight and the nonionic surfactants are those commonly used in the field of cosmetics for the purposes of providing a styling base, texture improvement or as a emulsifier, and the composition can be in the form of a mousse or aerosol (Column 2, lines 60-68, Columns 3-7, Column 8, lines 1-39, Column 12, lines 25-64)

The difference between the cited reference and the claimed invention is that the cited reference does not expressly disclose the combination of amphoteric, cationic and anionic polymers in the specified amounts. However, the prior art amply suggests the same as it is known in the art to formulate hair treatment compositions containing a mixture of the three types of polymers. Further, it would have been well within the skill to arrive at various amounts of the components through optimization of the prior art values based on the desired characteristics of the composition, for example, length of hold, flexibility and resistance to humidity. Furthermore, one of ordinary skill in the art would have been motivated to modify the prior art as above with the expectation of formulating a hair treatment composition that imparts of good feeling to hair and is safe to hair and skin (Column 2, lines 1-11).

Therefore, the claimed invention, as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been taught by the teachings of the cited reference.

Conclusion

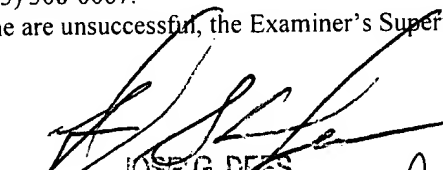
A facsimile center has been established in Technology Center 1600. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier numbers for accessing the facsimile machines are (703) 308-4556 or (703) 305-3592.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Choi whose telephone number is (703) 308-0067.

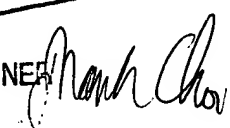
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. José Dees, can be reached on (703) 308-4628.

FIC

January 9, 2001


JOSE G. DEES
SUPERVISORY PATENT EXAMINER

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Frank Choi